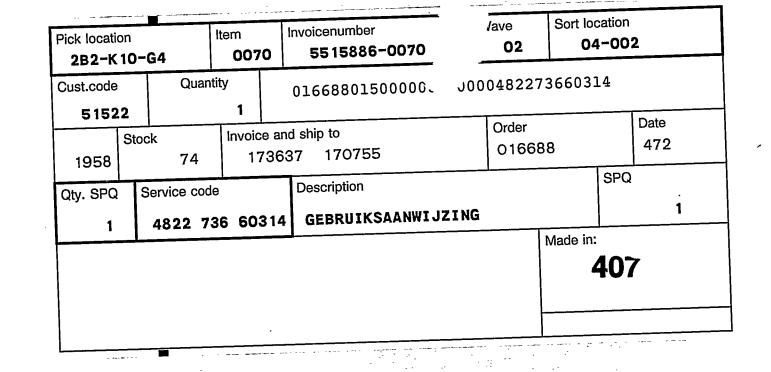


STU 130 A



**PHILIPS** 







## **About this manual**

This manual has been conceived in order to help you to install and use your Philips satellite receiver.

Carefully follow every instructions to ensure you are connecting and installing your equipment as described in sections 2.3.4. and 5.

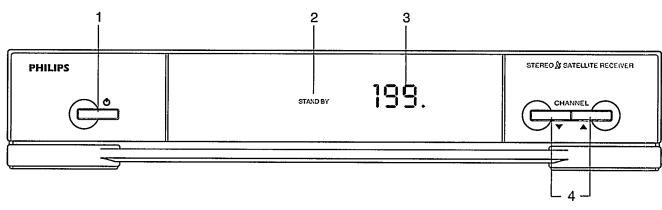
Your satellite receiver has been factory-programmed along with programme numbers -Refer to programmes list supplied with this manual -

- o This small dot in front of a sentence means that you must do something.
- > This arrow in front of a sentence shows the result of your previous action.

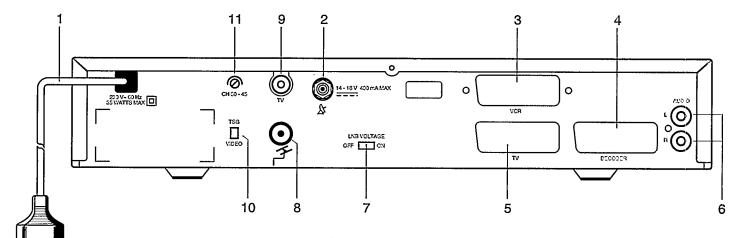
## **Table of contents**

Introduction	4
Connections and installation	5
Connecting an audio stereo appliance	5 6
Using your receiver	7
Watching a satellite programme	7
Modifying the initial programming	9
Modifying parameters	9
Video frequencies	9 1
Troubleshooting	1
Conv function	1

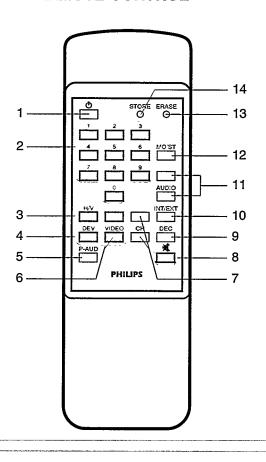
## **FRONT PANEL**



## **REAR PANEL**



## REMOTE CONTROL



## **STU 130A**





## **FRONT PANEL**

1 - Stand-by key

Q

3 - Main LED indicator

2 - Stand-by light

4 - Channel keys △ ▽

## **REAR PANEL**

- 1 230 V ~ /50 Hz Power cord
- 2 Satellite antenna input
- 3 Euroconnector for video-recorder
- 4 Euroconnector for external decoder
- 5 Euroconnector for TV-set
- 6 Audio cinch connector to Hi-Fi System
- 7 ON/OFF LNB Voltage
- 8 Terrestrial antenna input 🎢
- 9 Remodulator output
- 10 TSG/Video, test signal generate
- 11 UHF output tuning channels 30 to 45

## **REMOTE CONTROL**

- 1 Stand-by switch 🖰
- 2 Numerical block
- 3 H/V Polarization switch
- 4 DEV Contrast setting
- 5 Audio pre-programming P-AUD
- 6 Video frequency setting △ ▽
- 7 Programmes selection △ ▽
- 8 Sound mute 🕺

- 9 Decoder selection DEC
- 10 Internal or external INT/EXT
   Selection of audio/video decoding
- 11 Audio sound frequencies setting △ ▼
- 12 Mono/Stereo MO/ST selection
- 13 ERASE Erasing key
- 14 STORE Memory storage key

3



# Introduction

## Safety-related instructions

Dangerous voltage inside. Do not open the cabinet. Repairs should be carried out by qualified service personnel only.

To avoid short-circuits, which may cause fire or electric shock, do not expose this Philips satellite receiver to rain or moisture.

Before connecting the receiver to the mains, check that the mains supply voltage corresponds to the voltage printed on the label on the receiver base. If the mains voltage is different consult your dealer.

Ensure that no objects or fluids pass through the ventilation openings. if liquid is spilt into the receiver, disconnect the receiver from the mains and consult a qualified service technician.

Ensure that air can circulate freely through the ventilation openings of the receiver. Leave a space of at least 3 cm all around the receiver.

Do not place your receiver close to an external source of heat (radiator, etc.) or near appliances generating strong magnetic fields (e.g. motors, transformers).

Do not use your receiver in dusty places or where it may be subject to vibration. Avoid using your receiver immediately after moving from a cold to a warm location and vice versa, or under conditions of high humidity.

If you have to transport your receiver, avoid violent shocks.

For cleaning, use a damp chamois leather. Never use an abrasive.

Your receiver supplies 14 or 18 V DC voltage to your satellite dish antenna. Make sure you connect only your satellite dish to the satellite dish inputs, and nothing else.

Never connect or modify cables while the receiver is connected to the mains.

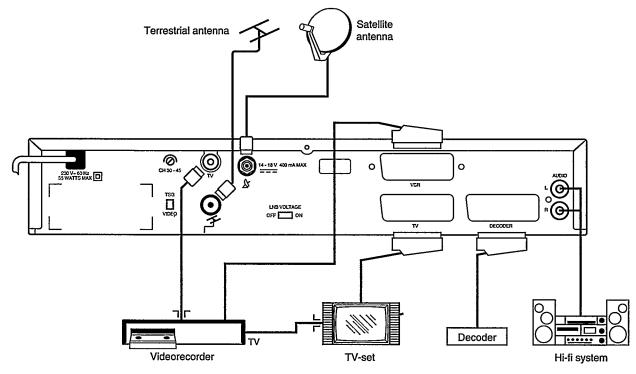
Do not connect your receiver to the mains yet, but continue reading these instructions.



# **Connections & installation**

This chapter explain how to connect your satellite receiver to equipments you already have, such as TV-set and video-recorder.

o According to your different possibilities, make the connections as follow:



Once the connections are made, except the antenna connection, proceed as follow:

- o Connect your TV-set as well as your video-recorder on mains and switch them ON.
- o Connect your satellite receiver on mains.

## How to connect your audio stereo equipment

If you wish to use your Hi-Fi system to listen to programmes, you must connect your stereo installation into the AUDIO cinch connectors on the rear panel of your receiver.

 Connect the «AUDIO L» -Left channel- and the «AUDIO R» -Right channel- plugs into the right and left input cinch connectors of your stereo equipment.

Do not connect «AUDIO L/R» into the «PHONO» sockets of your stereo equipment.

## Installing your remodulator

If you have made coaxial cables antenna connections only you must create a new programme. You must create a new programme on your TV-set -and your video-recorder- to be able to watch satellite programmes. To do that:

- o Place the switch «TSG» -on the rear panel- on the «ON» position.
- Make sure on your TV-set that the reception of terrestrial channels as well as on your video recorder is not disturbed.

- In case you have interference, select an other frequency by setting the «channel» screw at the back of the receiver with a screwdriver.
- Repeat this operation until there is no more interference on the terrestrial channels as well as on your video-recorder.
- o Select a programme number on your TV-set which will always be used for satellite programmes.
- o Tune your TV-set until the test picture appears on the screen -black and white bars-.

If you have a video-recorder proceed as follow:

- o Select the video-recorder programme number on your TV-set.
- Select a programme number that will always be used for recording satellite programmes. -for example, the same number as the one chosen for satellite programmes on your TV-set-.
- o Set your video recorder until the test picture appears on the screen -black and white bars-.
- > The channels on your receiver are tuned.

## Installing your decoder

If you have an external decoder, connect it to the euroconnector «Decoder» at the rear of the receiver. The receiver has been factory pre-programmed for some scrambled channels.

If you wish to program or change the type of installation of a decoder refer to Chapter 4 «Decoder Mode».

#### How to make the connection to the satellite antenna

## If you are connected to a collective antenna

To prevent damage to some types of collective antenna, it is necessary to set the supply of your receiver before connecting it.

 If the collective antenna needs no power from the satellite receiver, place the «LNB Voltage» switch at the rear of the receiver to the «OFF» position before connecting the satellite input to the antenna.

Note: For an antenna needing power from a receiver the «LNB Voltage» switch must be on the «ON» position -individual antenna-.

## Connection of your antenna

- o Switch-off every appliance
- o Connect your antenna to the satellite receiver according to the assembly diagrams in Chapter 2.
- o Switch on all of your appliance.

## Turning your antenna

- o Press the (1) key on the front panel.
- o Select the satellite programme you wish to watch by means of the numerical keys.
- o Turn your antenna until the programme appears on your screen.
- o Install your antenna according to the directions supplied with your satellite antenna.



## Watching a satellite programme

# If your satellite receiver and TV-set are connected by a coaxial cable

- Select the channel on your TV-set which is reserved to satellite programmes.
- Press the h key on your remote control to activate your satellite receiver.
- > A picture appears on the screen.

#### OR If your receiver and TV-set are connected by an euroconnector

- Press the key on your remote control to activate your satellite receiver.
- Select a programme by using the △ ♥
   CH kevs.
- > A picture appears on the screen.

## Selecting a satellite programme

Your Philips receiver has 199 satellite or radio channels that have been factory pre-programmed.

#### To select a programme

- o Use the △ ▽ keys on the front panel of the receiver to change programmes or use the CH △ ▽ keys of the remote control or enter directly the chosen programme number by using the numerical block.
- > The front panel display shows the number of the selected programme.

## How to record a programme

You can record non satellite programmes as you have always done it. Meanwhile recording satellite programmes is a bit different.

You can use your video-recorder to record satellite programmes mainly in three main ways:

- . Record a satellite programme while watching it.
- . Record a satellite programme while watching another TV programme -and not another satellite programme-.
- . Record a satellite programme while the TV-set is off.

## In any case

- o Select the satellite programme you wish to record on your receiver.
- If you have connected your equipment using a coaxial cable, select the channel reserved to satellite programmes on your video-recorder.

- If you have connected your equipment using an euroconnector cable, select the external mode -EXT- on your video-recorder.
- You may now proceed with the usual recording procedure. If you wish you may watch another TV program
   Terrestrial transmission or switch off your TV-set.

## Locking/Unlocking a programme

#### Locking

- o Select the channel that will be unaccessible -ie: 10-
- > 010 is displayed
- o Press the ERASE key of the remote control.
- > E - is displayed
- o Press twice on the «0» key of the remote control.
- > E is displayed then 010 blinks twice.
- > 010 is displayed

Note: Channel 010 is unacessible at this time by using the CH  $\bigwedge \bigvee$  keys. The search can only be made by using the numerical block by keyboarding its number.

- o Press 0-1-0
- > Display 010

#### Unlocking

- Enter the programme number on the numerical block -eg: Programme 10-.
- > 010 is displayed
- o Press «STORE».
- > 010 blinks twice. The programme is now accessible again with the CH △ ∇ keys.

## How to mute the sound

- o Press on the ¾ key of the remote control.
- > A green dot blinks on the right of the display and the sound is muted.
- o Press again on the ¾ key to reactivate the sound.

## How to switch your receiver to stand-by mode 🖰

- o Press the (1) key on the remote control or on the receiver.
- > A green light turns on and the receiver switches to stand-by.



# 上 How to modify the initial programmation of your receiver

## How to modify the parameters of a programme

## Video frequencies

Use one of the keys of the remote control "VIDEO"  $\triangle$  or  $\nabla$ . The selection of the frequency -from 920 to 2.050 MHz- is made by steps of 250 kHz. If the VIDEO FREQUENCY MODE is activated, the frequency may be entered by the numerical block from 0 to 9.

Note: By direct entry through the numerical keys, for frequency inferior to 1000 MHz, it is necessary to enter 0 first.

For example:

Enter	<u>Display</u>	Frequency input (MHz)	Frequency band in (MHz)
o 0950	<b>&gt;</b> 950	950	920 to 999
o 1950	<b>&gt;</b> 9.50	1950	1000 to 1999
o 2050	<b>&gt;</b> 0.50	2050	2000 to 2050

## Picture contrast -DEV-

- o Press the DEV key to adjust the picture contrast.
- > 2 positions «LO» video deviation of 16 MHz «HI» video deviation of 25 MHz

## **Polarization**

The H/V key allows the choice of the LNC supply

	<u>Display</u>	LNB voltage	<u>Polarization</u>
o Press H/V	> (-H-)	18 V	Horizontal
o Press H/V	> (-V-)	14 V	Vertical

To chose the tone control -22 kHz-

- o Press H/V
- o Then on «0» key on the numerical block.
- > Display ON or OFF -Meaning 22 kHz «ON» or «OFF»

## **Audio frequencies**

The user can chose between two modes:

- 1) Pre-programmed audio frequencies
  - o Press P-AUD on the remote control to obtain the chosen audio frequency.
  - > First press: Display P-A
  - > Next presses: Switch to pre-programmed frequencies
  - o Press «STORE» to memorize your choice.
  - > A01-A05 in MONO/LARGE
  - > A06-A013 in MONO/NARROW
  - > A14-A17 in STEREO

Refer to the following table

Display	Right Frequency MHz	Left Frequency MHz	Mode
A01	6.50	-	MONO 50 μ
A02	6.60	_	MONO 50 μ
A03	6.65	-	MONO 50 μ
A04	5.80	_	MONO J17
A05	6.60	_	MONO J17
A06	7.02	-	MONO 75 μ
A07	7.20	-	MONO 75 μ
A08	7.38	-	MONO 75 μ
A09	7.56	-	MONO 75 μ
A10	7.74	-	MONO 75 μ
A11	7.92	-	MONO 75 μ
A12	8.10	-	MONO 75 μ
A13	8.28		MONO 75 μ
A14	7.02	7.20	STEREO 75 µ
A15	7.38	7.56	STEREO 75 µ
A16	7.74	7.92	STEREO 75 µ
A17	8.10	8.28	STEREO 75 μ

## 2) Manual tuning of the audio frequency

- $\circ$  Press the AUDIO  $\bigwedge$   $\bigvee$  key of the remote control.
- > The corresponding frequency to the programme is displayed.
- $\circ$  Press once more on AUDIO  $\bigwedge$   $\bigvee$  to adjust the audio frequency of your choice.
- o Press «STORE» to memorize your choice.

It is also possible to enter directly the audio frequency through the numerical keyboard.

- o Press AUDIO △ ♡.
- > The corresponding frequency is displayed.
- o Enter directly the 3 digits of the chosen frequency -eg: 6-5-0-
- o Press «STORE» to memorize your choice.

## 3) Tuning MONO/STEREO

- o Press MO/ST
- $\succ$  The corresponding programme mode is displayed.
- o Press on MO/ST again, to switch to the chosen mode.

Mode	Display
Mono/large Mono/Etroit Stereo	$\begin{bmatrix} \end{bmatrix}$ 50 μs or J17 Press 9 to switch from 50 μs to J17 and vice versa $- \begin{bmatrix} -1 \end{bmatrix}$ 75 μs only 75 μs only

o Press «STORE» to memorize your choice.

## **Decoder Mode**

- 1) Choise of type of decoding
  - o Press DEC to select «DECODING».

DISPLAY	MEANING
d-1	Canal +, Canal satellite, Première, Vidéocrypt
d-2	France Supervision, Canal + 16/9, Cine/cinema 16/9 Filmnet (Base band MAC)
d-3	Base band PAL

- o Press «STORE» to memorize your choice.
- 2) The key INT/EXT allows to select the type of internal or external decoding of the AUDIO and VIDEO sources.
  - $\circ$  Press on the INT/EXT key to switch from one mode to the other one.

	DISPLAY	AUDIO	VIDEO
>	1-1	Internal	Internal
>	E-I	External	Internal
>	1-E	Internal	External
>	E-E	External	External

o Press «STORE» to memorize your choice.

# Troubleshooting

PROBLEM	POSSIBLE CAUSE	CORRECTION
No picture, no sound and no display	Receiver off.	Check mains plug
No picture, no sound. Correct display.	If you use the coaxial cable connection only, TV-set and receiver are not tuned on the same UHF channel.	Check your equipment and refer to the Installation Chapter.
	Faulty cables connections -broken or corroded cable	Check every connection.
	The antenna does not pick up the satellite signal	Check if the programme corresponds to the wanted satellite.
	The converter power supply is shut off.	Check the coax link between the receiver and the converter. Check if the «LNB Voltage» switch on the rear panel is «ON».
	The converter power supply is shorted.	Switch to stand-by mode during few seconds before resetting.
Correct picture. Poor sound or no sound	Audio programmation parameters are wrong.	Check the audio programmation parameters.
No picture, correct sound quality.	The decoder programmation parameters are wrong.	Check the audio programmation parameters.
Poor picture quality.	The antenna is improperly pointed.	Point the antenna.
	The transmitted signal is too weak.	Install a larger antenna.
Wave effect on picture during satellite reception; Correct terrestrial reception.	Interference on the UHF channel on which the receiver is transmitting. (eg: terrestrial stations or video-recorder on the same channel.	Set receiver and TV-set on another interference-free channel.
Satellite receiver is not activited by the remote control unit.	No or low batteries inside the remote control unit.	Check and replace if necessary.



#### Important

The «COPY FUNCTION» is described below. You will used it to «program» another receiver, in other words, to transfer all data within the receiver's internal memory. This includes all tunings done.

The data transfer will be operated from the MASTER to the SLAVE receiver.

## **Copy function**

- o Disconnect the equipment from mains.
- Connect the DECODER euroconnector of the MASTER receiver to the TV euroconnector of the SLAVE receiver by means of a full scart cable.
- o Connect the equipments to the mains and switch them ON.
- o Make sure that both equipments are set on programme 001.
- Switch both receivers back to stand-by mode.
- o Shortly press △ programme key on SLAVE receiver.
- -r- is displayed.
- Shortly press ♥ programme key on MASTER receiver.
- -t is displayed.
- The display on each receiver blinks and the copy functions starts.
- > 001 --> 002 --> 003 --> ... --> 199 displays in sequence.
- > At the transmission end, the figures CXX on the displays must be identical.
- > After few seconds both equipments return to the stand-by mode.

#### Note:

Repeat this operation if the figures CXX are different when transmission ends.

Press (b) key to quit the copy function mode before the transmission starts. If the transmission is already started, disconnect the equipment from the mains to quit.

## **STU 130A**

## PAL/SECAM Satellite receiver

#### **PICTURE QUALITY**

- PAL & SECAM Sattellite signal reception.
- Compatible for reception of MAC signals with MAC Decoder.
- MAC signals transferred to TV-set by RVB for better picture quality.
- Compatible with external decoder.

#### **AUDIO**

- 4 stereo selections.
- 13 Mono selections.
- Possible tuning for non-standard stereo and mono channels.
- Deemphasis selection.
- ASTRA Compatible.

#### **FUNCTIONS**

- 199 Pre-programmed channels.
- RADIO programmes listening.
- All functions activated by remote control unit.
- Multifunction display.
- Programmes locking.

#### **VIDEO**

PAL/SECAM : 5 MHz

#### **AUDIO**

Frequency response

(DIN 45500)

: 20 Hz to 15 kHz

MONO

: Tunable from 5.6 to

9.90 MHz (13 preselected)

**STEREO** 

: Tunable from 5.6 to 9.90 MHz by steps

of 180 kHz -4 preselected-

Deemphasis selection Bandwidth

: 50 μs, J17, 75 μs : 130/280 kHz

## RECEPTION

Frequency band

: 920-2050 MHz Input level : 47 to 77 dB $\mu$ V (75  $\Omega$ )

Input bandwidth

: 27 MHz

Demodulator Frequency shift : CCIR/G : 16/25 MHz/V

Band

: Ku band

## INTERFACE FOR SATELLITE **ANTENNA**

Input LNB Voltage : Type F Connector :0V/14 V/18V (400mA)

Selected by user

Polarization

command

: «MARCONI Type»

14/18

Tone

: 22 kHz -ON/OFF-

## **MISCELLANEOUS**

Environmental

temperature Power supply : +5 to 45°C - 41 to 113°F-: 230 V ~ -10% +6% 50 Hz

Consumption Standby

: ≤ 35 W

Consumption Gross weigh

: ≤ 16 W : 4 kg - 18 lbs -

Dimensions

 $(H \times L \times D)$ 

: 70 x 375 x 275 mm

Package

dimensions

: 100 x 430 x 360 mm

#### CONNECTIONS

- TV

: Euroconnector (RVB &

CVBS)

Video-recorder: Euroconnector (CVBS)

- Décoder

: Euroconnector (base band CVBS output; RVB & CVBS inputs).

- Audio

: Cinch (RCA) plug -left

and right- 500 mV.

- UHF

Modulator

: Tunable from 30 to 45 -

set on channel 43-: Terrestrial anterina input -

female IEC-

: Terrestrial antenne output -

male IEC-

#### **ACCESSORIES**

Remote control unit: 2 x 1.5V AAA

batteries.

User's Manual.

European warranty booklet.

## STU 130 A/00G

## **PROGRAMME LIST PROGRAMMLISTE**

The STU130A satellite receiver allows access to all TV or RADIO programmes listed bellow. This list is also stored in your receiver to facilitate the receiver installation. Assumption has been made that you have connected an FSS or a TELECOM LNB on the antenna input. If this is not the case you should have to modify some settings in your receiver. (please refer to the user manual for more instructions)

Ihr STU130A Satellitenempfänger ermöglicht Ihnen den direkten Zugang der nachfolgenden TV- oder Radioprogrammen. Um Ihnen die Installation zu erleichetern, sind die Daten dieser Programmen im Empfänger vorprogrammiert. Dazu wurde angenommen das am Antenneneingang ein FSS LNC-Typ, oder ein Telecom LNC-Typ angeschlossen ist. Ist dies nicht der Fall, müssen betreffende Systemwerte geändert werden. Bitte folgen Sie dazu sorgfällig die Anweisung in der Bedienungsanleitung.

## **PROGRAMMES**

	Programme Programme Programme	DEV.video DEV.video DEV.video	Sat Freq Sat Freq Sat Freq (MHz)	Int Freq Int Freq Int Freq (MHz)	Pol. Pol. Pol.	Audio Mode Audio Mode Mode Audio	Audio freq. Audio freq. Freq. audio (MHZ)	Deemph. Deemph. Deemph.	Verschlüsselt TV payante
A	ASTRA 1A-1B-1C-1D	(19,2 ° E	)		LI	NB LOCAL OS	CILLATOR =	9.75 G	HZ
1 2 3 4 5 6 7 8 9 10 1 12 13 4 5 10 1 12 2 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3		LOW	<u>`</u>	(MHz)  1744 1214 1832 1479 1538 1464 1656 1523 1773 1891 1597 1362 1303 1436 1391 1714 1582 1671 1273 1877 1509 1627 1568 1244 1229 1803 1729 1686 1759 1347 1288 1332 1171 1641 1186 1377 1936 1906 1318 1259 1494 1862 1921 1553 1612	HHHVVHVHHHVHHHHHHVVVVHVHVVVVVHHHHVVVVVV	STEREO ST		9.75 G  75-µs  75-µs	DEC 1 E/E DEC 1 E/E DEC 1 E/E DEC 1 E/E DEC 2 E/E
47 48 49	BBC 1 radio BBC 3 radio Sky radio	LOW LOW LOW	10979 10979 11318	1229 1229 1568	V V V	STEREO STEREO STEREO	7.28 / 7.56 7.74 / 7.92 7.38 / 7.56	75-μs 75-μs 75-μs	
50	BBC world	LOW	11553	1803	Н	MONO NARROW	7.38	75-μs	

## **TV PROGRAMMES**

Programme Programme Programme	DEV.video DEV.video DEV.video	Sat Freq Sat Freq Sat Freq (MHz)	Int Freq Int Freq Int Freq (MHz)	Pol. Pol. Pol.	Audio Mode Audio Mode Mode Audio	Audio freq. Audio freq. Freq. audio (MHZ)	Deemph. Deemph. Deemph.	Pay TV Verschlüsselt TV payante
ASTRA 1A-1B-1C-1	D (19,2 ° E		(	LNE	B LOCAL OSCIL		10.000 GH	lz
51 ARD (D) 52 ZDF (D) 53 Nord-3 (D) 54 RTL (D) 55 SAT-1 (D) 56 RTL-2 (D) 57 PRO-7 (D) 58 VOX (D) 59 DSF (D) 60 n-tv (D) 61 3-sat (D) 62 MDR (D) 63 West-3 (D) 64 Sud-West-3 (D) 65 Bayern-3 (D) 66 Premiere (D) 67 Teleclub (CH) 68 MTV EUROPE (GB) 69 Cartoon-network (GB) 70 CNN (USA) 71 Eurosport (D) 72 Sky-news (GB) 73 Sky-one (GB) 74 Children Channel (GB) 75 UK-Living (GB) 76 UK-gold 77 Movie Channel (GB) 78 Sky-Movies (GB) 79 Sky-Sports (GB) 80 Bravo/adult (GB) 81 Nickelodeon 82 QVC 83 Discovery 84 Filmnet movies 85 RTL-4 (NL) 86 RTL-5 (NL) 87 Galavision (E) 88 Documania (E) 90 Cineclassics (E) 91 MINIMAX (E) 92 TV - 3 (S) 93 TV - 3 (DK) 94 TV - 3 (DK) 95 Filmnet + (GB) 97 BBC 1 radio 98 BBC 3 radio 99 Sky radio 100 BBC world  TELECOM 2B (5 W	LOW	11494 10964 11582 11229 11288 11214 11406 11273 11523 11641 11347 11112 11053 11186 11141 11322 11421 11023 11627 11259 11377 11318 10994 10979 11553 11479 11479 11597 11597 11097 11597 11097 11597 11097 11097 11097 11097 11097 11097 11097 11097 11097 11098 11097 11108 11097 11097 11097 11097 11098 11099 11097 11108 11099 11097 11108 11099 11097 11108 11099 111097 111097 111097 111098 11099 11099 111097 111097 111097 111098 111099 11109 1109 1109 1109 1109 1109 1109 1109	1494 0964 1582 1229 1288 1214 1406 1273 1523 1641 1347 1112 1053 1186 1141 1464 1332 1421 1023 1627 1259 1377 1318 0994 0979 1553 1479 1436 1509 1097 1597 1038 1097 1098 1097 1098 1099 1097 1098 1099 1097 1098 1099	ннн>>н>нны>ннн>нннны>>>>н	STEREO ST	7.02 / 7.20 7.21 / 7.20 7.22 / 7.20 7.23 / 7.56 7.34 / 7.56 7.38	75-μs 75-μs	DEC 1 E/E DEC 1 E/E DEC 1 E/E DEC 2 E/E DEC 2 E/E DEC 2 E/E DEC 2 E/E DEC 2 E/E
101 TF-1 (F) 102 France-2 (F) 103 TMC (F) 104 RTL (F) 105 ARTE (F) 106 M6 (F) 107 LCI (F)  TELECOM 2A (8 ° M	HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT	12690 12564 12648 12732 12606 12522 12585	1215 1089 1173 1257 1131 1047 1110	V V V V V H	MONO WIDE	5.80 5.80 5.80 5.80 5.80 6.60	J17 J17 J17 J17 J17 J17 50-µs	DEC 1 E/E DEC 1 I/E
108 Canal Plus 4/3 (F) 109 MCM (F) 110 Eurosport (F) 111 Planete (F) 112 Canal Jimmy (F) 113 Cine-Cinema (F) 114 Cine-Cinefil (F) 115 Paris Premiere (F) 116 Supervision 16/9 (F) 117 C +16/9 (F) 118 Cine-Cinema 16/9 (F) 119 RTL radio 120 Europe 1  TELECOM 2B (5 ° W)	HIGHT	12648 12543 12711 12585 12732 12669 12627 12564 12606 12522 12690 12606 12522	1173 1068 1136 1110 1257 1194 1152 1089 1131 1047 1215 1131 1047	V H H V V V V V V V V V	STEREO STEREO STEREO MONO WIDE MONO WIDE MONO WIDE MONO WIDE MONO WIDE MONO WIDE STEREO STEREO STEREO MONO WIDE MONO WIDE MONO WIDE STEREO STEREO STEREO STEREO MONO WIDE	7.02 / 7.20 7.02 / 7.20 6.60 6.60 6.60 7.20 7.20 7.20 7.02 / 7.20 7.02 / 7.20 7.02 / 7.20 6.85 6.85	75-µs 75-µs 50-µs 50-µs 50-µs 50-µs 50-µs 75-µs 75-µs 75-µs J17 J17	DEC 1 I/E DEC 1 I/E DEC 1 E/E DEC 1 E/E DEC 1 E/E DEC 1 E/E DEC 1 E/E DEC 1 E/E DEC 2 E/E DEC 2 E/E DEC 2 E/E
121 TF-1 (F) 122 France-2 (F) 123 TMC (F) 124 RTL (F) 125 ARTE (F) 126 M6 (F) 127 LCI (F)	HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT	12690 12564 12648 12732 12606 12522 12585	1690 1564 1648 1732 1606 1522 1585	V V V V V H	MONO WIDE MONO WIDE MONO WIDE MONO WIDE MONO WIDE MONO WIDE MONO WIDE	5.80 5.80 5.80 5.80 5.80 5.80 6.60	J17 J17 J17 J17 J17 J17 J17 50-μs	DEC 1 E/E DEC 1 I/E

Pr	rogramme rogramme rogramme	DEV.video DEV.video DEV.video	Sat Freq Sat Freq Sat Freq (MHz)	Int Freq Int Freq Int Freq (MHz)	Pol. Pol. Pol.	Audio Mode Audio Mode Mode Audio	Audio freq. Audio freq. Freq. audio (MHZ)		Verschlüsselt TV payante
TE	ELECOM 2A (8°W)				LNB I	LOCAL OSCI	LLATOR = 1	1.0 GHz	
129 Mi 130 Eu 131 Pl 132 Ca 133 Ci 134 Ci 135 Pa 136 Su 137 C	anal Plus 4/3 (F) CM (F) urosport (F) lanete (F) anal Jimmy (F) ine-Cinema (F) ine-Cinefil (F) aris Premiere (F) upervision 16/9 (F) +16/9 (F) ine-Cinema 16/9 (F) TL radio	HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT	12648 12543 12711 12585 12732 12669 12627 12564 12606 12522 12690 12606	1648 1543 1711 1585 1732 1669 1627 1564 1606 1522 1690 1606	V H H H V V V V V V V	STEREO STEREO MONO WIDE MONO WIDE MONO WIDE MONO WIDE MONO WIDE MONO WIDE STEREO STEREO MONO WIDE	7.02 / 7.20 7.02 / 7.20 6.60 6.60 7.20 7.20 7.20 7.20 7.02 / 7.20 7.02 / 7.20 7.02 / 7.20 6.85	75-µs 75-µs 50-µs 50-µs 50-µs 50-µs 50-µs 50-µs 75-µs 75-µs 75-µs J17	DEC 1 I/E DEC 1 I/E DEC 1 E/E DEC 1 E/E DEC 1 E/E DEC 1 E1E DEC 1 E1E DEC 1 E1E DEC 2 E1E DEC 2 E1E DEC 2 E1E
140 E	urope 1	HIGHT	12522	1522	٧ .	MONO WIDE	6.85	J17	,
	· · · · · · · · · · · · · · · · · · ·	E)	40070	4000					-
144 TO 145 HI 146 TV 147 PO	V-7 SC GRT BB-TV (TR) V-POLONIA (PL) OL-SAT (PL)	HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT	10972 11658 11178 11095 11617 11080 11638	1222 1908 1428 1345 1867 1330 1888	V V V V H H	MONO WIDE MONO WIDE MONO WIDE MONO WIDE STEREO MONO WIDE MONO WIDE MONO WIDE	6.60 6.60 6.65 7.02/7.20 6.65 6.60	50-μs 50-μs 50-μs 50-μs 75-μs 50-μs 50-μs	
	V5 Europe	HIGHT	11080	1330	V	MONO WIDE	6.60	J 17	
150 E 151 E 152 N 153 N 154 E 155 E 156 E 157 T 158 M	tuantum  urosport (GB)  urosport (D)  IBC-Super (GB)  IBC-Super (D)  uroNews (GB)  uroNews (D)  uroNews (F)  RT  ABC  Ubbal - TV (A)	HIGHT	10972 10972 10972 10987 10987 11575 11575 11575 11181 11554 11638	1222 1222 1222 1237 1237 1825 1825 1825 1431 1804 1888	Н Н Н V V V V V Н Н Н Н Н Н Н Н Н Н Н Н	MONO WIDE STEREO STEREO	7.02 7.20 7.20 6.65 7.02 7.02 6.35 7.38 7.02 / 7.20 7.02 / 7.20 7.02 / 7.20	50-µs 50-µs 50-µs 50-µs 50-µs 50-µs 50-µs 75-µs 75-µs 75-µs	
		Ξ)			LNB	LOCAL OSCI	LLATOR = 9	.75 GH	Z
161 R 162 T 163 R 164 A 165 S 166 In 167 C 168 B 169 B	IAI-UNO (I) IAI-DUE (I) VE -INT ITP - INT I-TV (TR) Show-TV (TR) Other Star (TR) Sine 5 (TR) SiBC-World1 SiBC-World2 France infos	HIGHT	10972 11095 11149 11658 10987 11575 11617 11080 10987 10987 11080	1222 1345 1399 1908 1237 1825 1867 1330 1237 1237 1330	V H V H V V H V V V V V V V V V V V V V	MONO WIDE	6.60 6.60 6.60 6.65 6.65 6.65 6.60 7.38 7.56	J 17 J 17 50-µs 50-µs 50-µs 50-µs 50-µs 50-µs 50-µs J 17	
El	UTELSAT 2F3 (16°	E)			LNB	LOCAL OSC	ILLATOR = 1	0.0 GH	Z
175 H 176 T 177 P	V-7 :SC GRT (TR) HBB-TV (TR) V-POLONIA (PL) POL-SAT (PL)	HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT	10972 11658 11178 11095 11617 11080 11638	0972 1658 1178 1095 1617 1080 1638	V V V V H H	MONO WIDE MONO WIDE MONO WIDE STEREO MONO WIDE MONO WIDE	6.60 6.60 6.60 6.65 7.02/7.20 6.65 6.60	50-µs 50-µs 50-µs 50-µs 75-µs 50-µs	
	UTELSAT 2F1 (13° V5 Europe	E) HIGHT	11080	1080	LNB .	LOCAL OSC	6.60	<i>U.U GП</i> Ј17	Z
179 C 180 E 181 E 182 N 183 N 184 E 185 E 186 E 187 T 188 N	Quantum Eurosport (GB) Eurosport (D) NBC-Super (GB) NBC-Super (D) EuroNews (GB) EuroNews (D) EuroNews (F)	HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT	10972 10972 10972 10987 10987 11575 11575 11575 11181 11554 11638	0972 0972 0972 0987 0987 1575 1575 1575 1181 1554 1638	H H V V V V H H H	MONO WIDE STEREO STEREO	7.02 7.20 7.20 7.20 6.65 7.02 7.02 6.35 7.38 7.02 / 7.20 7.02 / 7.20 7.02 / 7.20	50-µs 50-µs 50-µs 50-µs 50-µs 50-µs 50-µs 50-µs 75-µs 75-µs 75-µs	
	UTELSAT 2F2 (10°	,	10070	0070		LOCAL OSC			Z
191 F 192 T 193 F 194 A 195 S 196 II 197 C	RAI-UNO (I) RAI-DUE (I) IVE -INT RTP - INT A-TV (TR) Show-TV (TR) nter Star (TR) Dine 5 (TR) BBC-World1 BBC-World2	HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT HIGHT	10972 11095 11149 11658 10987 11575 11617 11080 10987 10987	0972 1095 1149 1658 0987 1575 1617 1080 0987	V H V H V V H V	MONO WIDE	6.60 6.60 6.60 6.65 6.65 6.60 6.60 7.38 7.56	J 17 J 17 50-µs 50-µs 50-µs 50-µs 50-µs 50-µs 50-µs	



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